

**MINUTES  
FOR THE MEETING OF THE  
COMMISSION ON WATER RESOURCE MANAGEMENT**

**DATE:** March 21, 2017  
**TIME:** 10:00 am  
**PLACE:** DLNR Board Room  
Kalanimoku Bldg.

Commissioner Kamana Beamer called the meeting of the Commission on Water Resource Management to order at 10:02 a.m.

The following were in attendance and/or excused:

**MEMBERS:** Mr. William Balfour, Jr., Mr. Michael Buck, Dr. Kamana Beamer, PhD, Mr. Neil Hannahs, DOH Representative Mr. Keith Kawaoka

**STAFF:** Jeffrey Pearson, P.E., Roy Hardy, Dean Uyeno, Lenore Ohye, Charley Ice, Rebecca Alakai, Aaron Strauch, Patrick Casey

**COUNSEL:** Colin Lau, Esq.

**OTHERS:** Robbie Alm (CLN), Erwin Kawata (BWS), Jonathan Scheuer, Natasha Baldanf (DHHL/Sullivan Meheula Lee), Ikaika Lowe (Student), Kanoe Nakata (Student), David Henkin (Earthjustice), Kylie Wager (Earthjustice), Nanea Lo (Student), Steven Chang (DOH)

Commissioner Beamer announced that there are updates on the agenda and no action items on today's agenda.

**A. APPROVAL OF MINUTES**

January 17, 2017

**MOTION: (BUCK/HANNAHS)**

To approve the minutes of January 17, 2017

MINUTES UNANIMOUSLY APPROVED (Balfour, Kamana, Buck, Hannahs)

**B. ANNOUNCEMENTS**

Commissioner Beamer introduced the new Commission secretary, Faith Ching.

**C. NON-ACTION ITEMS****1. Red Hill Updates, Moanalua and Waimalu Ground Water Management Areas, Oahu**

Mr. Steven Chang of the Department of Health, Solid and Hazardous Waste Branch updated the commission with a powerpoint presentation of the Red Hill Bulk Fuel Storage Facility that is situated in the Moanalua and Waimalu Ground Water Management Areas, Oahu. A copy of the powerpoint presentation is attached and is a part of the minutes.

Chair Case arrived at 10:36 am and recommended a 5-minute break before continuing on.

**2. Update on the Mediation of the Combined Petition to Amend the Interim Instream Flow Standards for Waimea River and its Headwaters and Tributaries, and Complaint and Petition for Declaratory Order Against Waste, Filed by Po'ai Wai Ola/West Kauai Watershed Alliance (through Earthjustice); and if there is a fully executed Mediation Agreement presented, Approval or Disapproval by the Commission.**

Deputy Director Jeffrey Pearson announced that the intent today is the update/decision making on the mediation that is taking place in Kauai with the petition and complaint that is brought forth by Earthjustice. He introduced Robbie Alm as the Mediator for this issue.

Mr. Robbie Alm updated the Commission and stated that the parties have been meeting little over a year. Although the parties have had various good and fruitful discussions, the mediation has not been resolved. Mr. Alm stated that he feels confident that there is a possibility of resolving the dispute. They are very close in resolving the dispute and requested that the Commission give another month in hopes that the issues will be resolved and present the Commission with an agreement at the next meeting.

Commissioner Balfour recommended approval for a one month extension.

**(BALFOUR/HANNAHS)**

To approve a one month extension.

**UNANIMOUSLY APPROVED**

**TESTIMONY:**

Kanoe Nagata from Kailua, Oahu spoke about the Waimea Waterfall issue. There were no representation from Kauai about this matter. According to Hawaii model mediation, things are kept confidential. Ms. Nagata referred to the term batna mediation which means to negotiate and compromise. She felt that the batna for those who want the dam to be removed and the waterfall restored that their batna is all or nothing. Ms. Nagata stated that

it is important to support the petition. She feels that bringing life to that river is like bringing life to the community. Teenagers are taking time and effort to support this petition and the restoration of water in Waimea water.

**D. NEXT COMMISSION MEETINGS (TENTATIVE)**

April 18, 2017 (Oahu)

May 16, 2017 (Oahu)

Chair Case requested an update for the following month's agenda items.

Deputy Director stated that tentative review of the Na Wai Eha Contested Case will be in May of 2017, and East Maui streams review will be tentatively in June, 2017.

A possible agenda item may be from the Navy to present their update on Red Hill.

Commissioner Beamer requested a site visit of Red Hill and to consider an update or how he can help on an expedited traditional customary rights permitting process that was approved in regards to stream water diversions.

Commissioner Buck suggested field trip on streams and Deputy Director Pearson is already in discussion with Dean Uyeno on this matter.

Deputy Attorney General requested to hold the next Commission meeting on April 25 because he will not be able to attend.

David Henkin – EJ – requested holding the April meeting on Kauai.

MOVED AND SECONDED TO ADJOURN  
(BALFOUR/BEAMER)

Meeting adjourned at 11:53 AM.

Respectfully submitted,



FAITH CHING  
Secretary

APPROVED AS SUBMITTED:



JEFFREY T. PEARSON, P.E.  
Deputy Director

**United States Navy  
Red Hill Bulk Fuel Storage Facility  
Oahu, Hawaii  
AOC Update**

March 21, 2017

Steven Y. K. Chang

Hawaii Department of Health

Solid and Hazardous Waste Branch

**RED HILL STATUS UPDATE – 2017**

**LATEST FINDINGS, ACCOMPLISHMENTS AND ACTIVITIES:**

**Navy and DLA improving inspection and repair procedures**

**Detailed tank upgrade study in progress**

**Recent testing indicates tanks are not leaking**

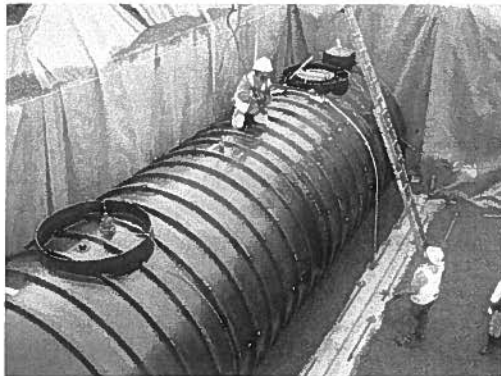
**Drinking water meets federal and state standards**

**Environmental monitoring increased around tanks**

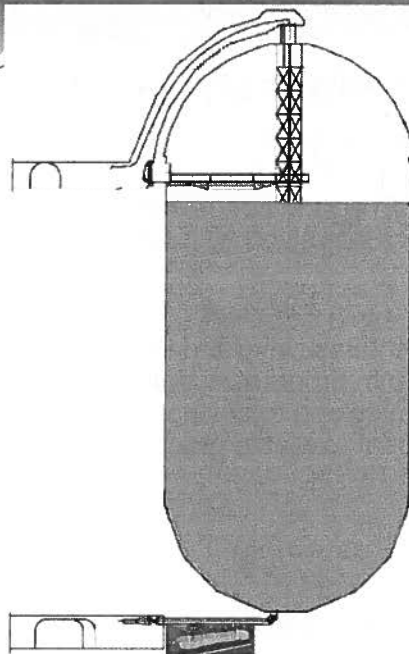
# Standard Double-Wall Fuel Storage Tank

Capacity: 20,000 gallons\*

Dimension: 10 ft. diameter and 38 ft. long



\*Largest UST in Hawaii: 40,000 gal  
Made to order tank 10' by 71' (approx)



Due to unprecedented and massive scale of this project rushing to implement secondary containment may actually not result in the best practicable solution.

63 – 20,000 gal tanks = the capacity of 1 Red Hill tank

The current evaluation of tank upgrade alternatives, have included designs that will improve integrity, reliability and provide a credible means of leak detection and/or fuel containment.

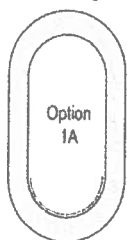
Initially, over 25 upgrade concepts grouped into three categories; tank interior upgrades, secondary containment with release detection, and tank exterior upgrades.

Fourteen technologies were screened based on the following parameters:

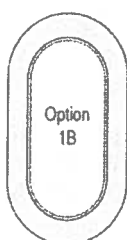
- Feasibility (can it be constructed in the field at Red Hill)
- Testability (will it hold product)
- Inspectable
- Repairable

### The six alternatives to be studied:

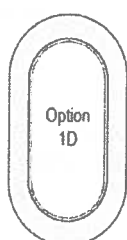
Maintain Existing Material    Add Full Internal Coating    New Steel Liner with Coating



Option  
1A

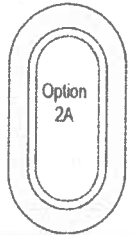


Option  
1B



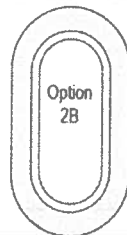
Option  
1D

Double Wall Tank  
with Carbon Steel



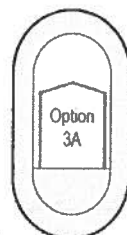
Option  
2A

Double Wall Tank  
with Stainless Steel



Option  
2B

Tank Within a Tank



Option  
3A

1. modifications to the current tank configuration,
2. the current configuration plus coatings,
3. complete replacement of the existing steel plates,
4. construction of a double-walled tank without an accessible outer wall using either carbon steel or stainless steel,
5. construction of a double-walled tank without an accessible outer wall using either carbon steel or stainless steel, and
6. construction of a new tank inside the existing tank.

## **Tank Upgrade Updates**

June 2017

October 2017

Final Report December 8, 2017

BAPT Decision Spring 2018

## **Section 4**

### **Leak Detection and Tank Tightness Testing indicates tanks are not leaking**

From December 2016 to February 2017 Navy performed annual tank tightness tests on all of the large tanks currently in use. All tanks passed and were reported as being tight to the Regulatory Agencies.

Navy plans to evaluate 3 electronic leak detection systems



## **Section 5**

### **Corrosion and Metal Fatigue**

Evaluation of Non-destructive Testing

Confirmation using Destructive Testing

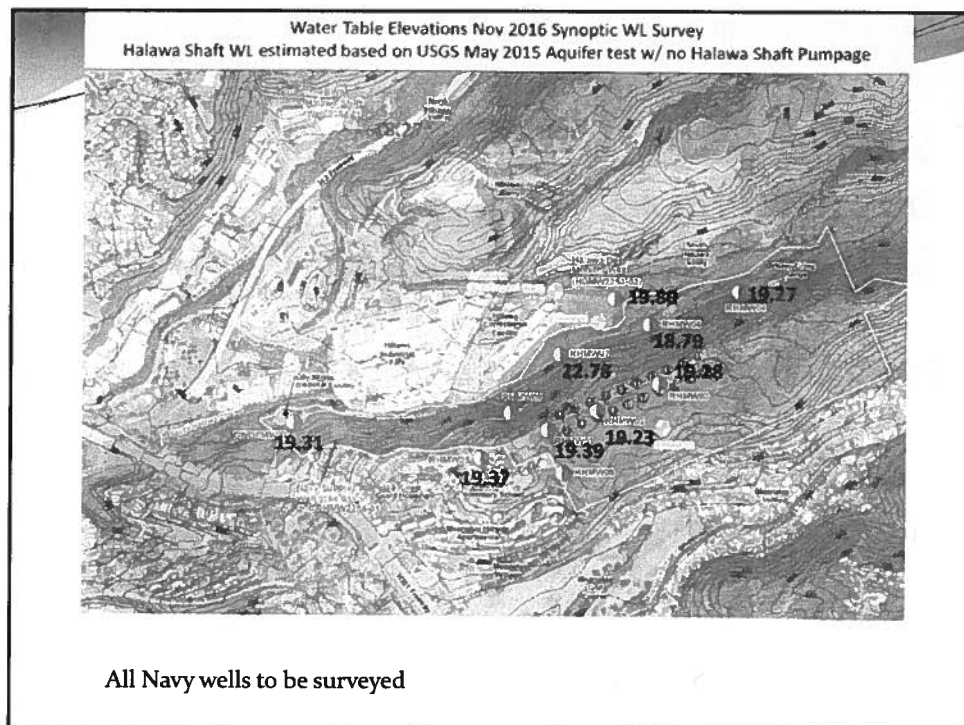
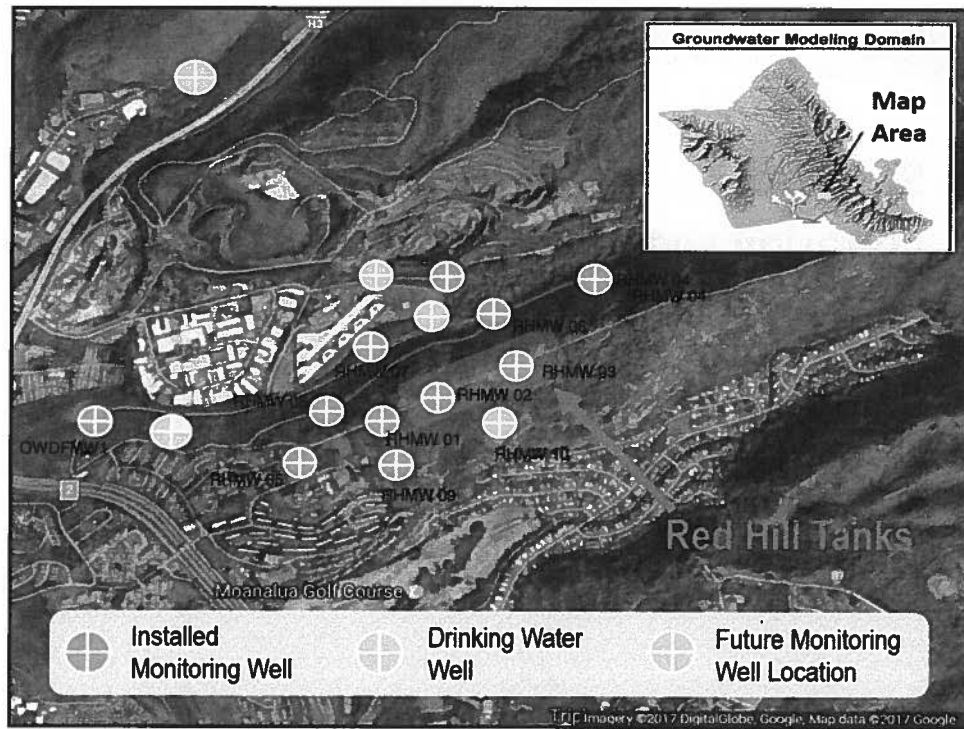


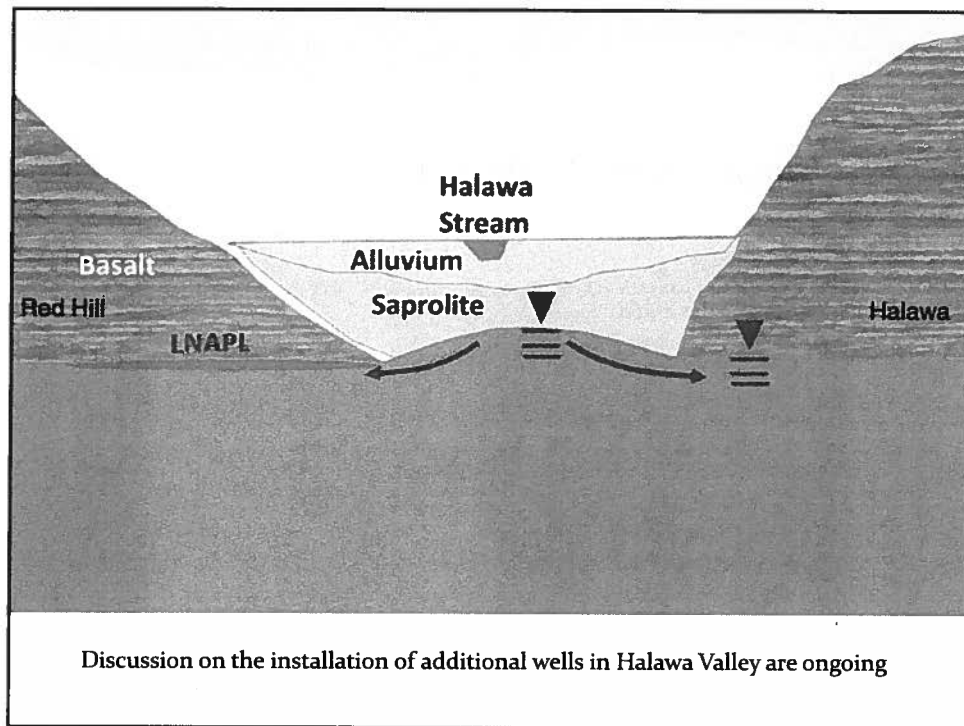
## **Section 6 and 7**

### **Investigation and Remediation of Release/ Groundwater Protection**

Environmental Monitoring Around Tanks Increased







## Section 8

### Risk/Vulnerability Assessment

#### Key Issues Discussed to Date

Establishing Probability and Magnitude of Future Major Releases

Identifying Vulnerabilities

Interaction Between Section 8 Work and Work Being Done  
Under Other Sections of the AOC

### **Navy's Position: (Admiral Fuller 3/17/17)**

- The drinking water is safe and the U.S. Navy is committed to keeping it safe.
- The tanks are not leaking.
- The Administrative Order on Consent process is working and on track.
- Red Hill is a modernized facility.
- The Red Hill facility is essential to the Fleet and other DoD services.

**Thank You**  
**Questions**

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For Further Information

[www.epa.gov/red-hill](http://www.epa.gov/red-hill)

[www.health.hawaii.gov/shwb/ust-red-hill-project-main/](http://www.health.hawaii.gov/shwb/ust-red-hill-project-main/)

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**United States Navy  
Red Hill Bulk Fuel Storage Facility  
Oahu, Hawaii  
AOC Update**

March 21, 2017  
Steven Y. K. Chang  
Hawaii Department of Health  
Solid and Hazardous Waste Branch

**RED HILL STATUS UPDATE – 2017**

**LATEST FINDINGS, ACCOMPLISHMENTS AND ACTIVITIES:**

Navy and DLA improving inspection and repair procedures  
Detailed tank upgrade study in progress  
Recent testing indicates tanks are not leaking  
Drinking water meets federal and state standards  
Environmental monitoring increased around tanks

**Facility meets or exceeds petroleum  
industry standards**

From May 9 to May 11, 2016 EPA and DOH officials evaluated the Red Hill Bulk Fuel Storage Facility and its operating records.

The evaluating team consisted of EPA and DOH programmatic staff and inspection personnel along with five industry experts specializing in bulk petroleum storage systems.

The team concluded that the facility's operations and maintenance meet or exceed practices encountered in private industry.

**Summary - Work to be Performed**

Section 2 - Tank Inspection, Repair, and Maintenance  
Section 3 - Tank Upgrade Alternatives  
Section 4 - Release Detection / Tank Tightness Testing  
Section 5 - Corrosion and Metal Fatigue Practices  
Section 6 - Investigation and Remediation of Releases  
Section 7 - Groundwater Protection and Evaluation  
Section 8 - Risk and Vulnerability Assessment

## Section 2 Tank Inspection Repair & Maint.

### Navy and DLA improve inspection and repair procedures

The Navy submitted a *Tank Inspection Repair and Maintenance Procedures Report* on October 11, 2016.

The AOC Parties began meeting to discuss plans for implementing additional improved tank inspection, repair and maintenance procedures and propose a schedule for tank repair at the Facility.

These meetings concluded on February 21, 2017.

Decision Document is due on April 24

## Section 3 Tank Upgrade Alternatives

### Detailed tank upgrade study in progress

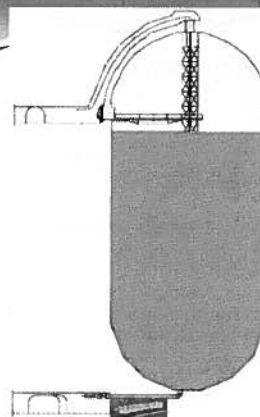
On December 8, 2016 EPA and DOH approved the *Tank Upgrade Alternatives Scope of Work* submitted by Navy and DLA on September 8, 2016.

The Regulatory Agency approval requires Navy and DLA to provide EPA and DOH with two interim progress updates on the study of tank upgrade technologies and to develop a decision process for selecting the best available practicable technology

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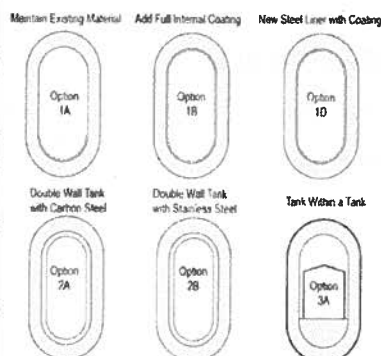
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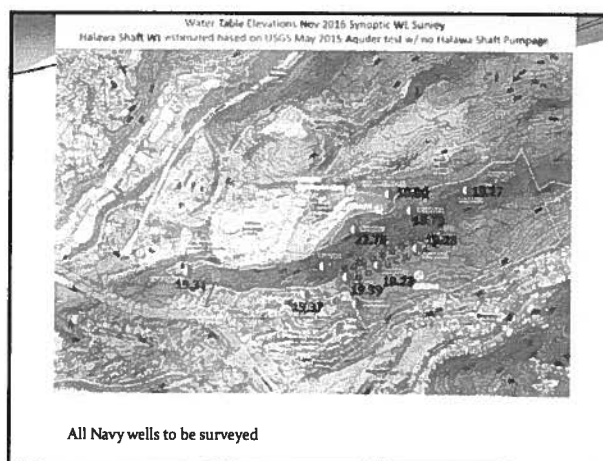
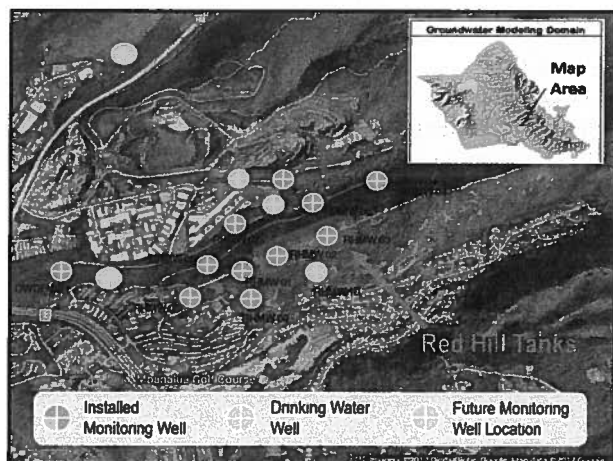
## Section 5 Corrosion and Metal Fatigue

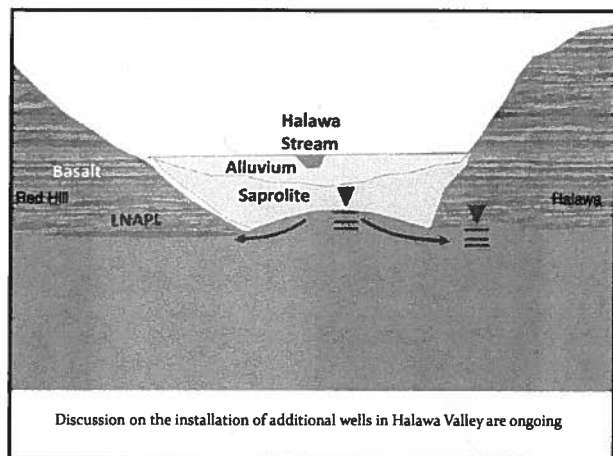
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